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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/032,127	12/20/2001	Anthony J.P. O'Toole	21676-06533	6972

758 7590 11/05/2003

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EXAMINER

TRAN, THIEN D

ART UNIT	PAPER NUMBER
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2665

DATE MAILED: 11/05/2003

3

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/032,127

Applicant(s)

O'TOOLE ET AL.

Examiner

Thien D Tran

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 05/21/2002 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-6, 9-19 are rejected under 35 U.S.C. 102(e) as being participated by Bremer et al (U.S Patent No. 6,061,392).

Regarding claims 1, 6, Bremer discloses a DSL modem comprising:

a bandwidth allocator adapted to dynamically adjust a bandwidth allocation based on voice channel demand, the bandwidth allocation defining a bandwidth for each of one or more voice channels and unchannelized data; and

a modem (formatter) coupled to the bandwidth allocator, the formatter adapted to combine the voice channels and unchannelized data onto a digital subscriber line according to the bandwidth allocation, thereby creating a transmission signal. See col.8 lines 1-20.

Regarding claims 2, 15, Bremer discloses an off-hook detector coupled to the bandwidth allocator, the off-hook detector adapted to couple to one or more local customer premises voice lines for measuring voice channel demand thereon. See col.8 lines 10-20.

Regarding claim 3, Bremer discloses a next-format storage coupled to the off-hook detector for storing a next bandwidth allocation, the next bandwidth allocation based on a detected change in voice channel demand. See col.8 lines 10-20.

Regarding claim 4, Bremer discloses that the transmission signal includes next bandwidth allocation data, the next bandwidth allocation data defining an anticipated bandwidth for the voice channels and data. See col.11 lines 15-30. See col.12 lines 1-10.

Regarding claim 5, Bremer discloses that bandwidth for each voice channel is associated with a timeslot in the transmission signal, the remaining transmission signal bandwidth available for data. See col.10 lines 30-50.

Regarding claim 9, Bremer discloses that the network frames are synchronized to a telephone-network timing reference. See col.11 lines 60-65.

Regarding claims 10, 18, Bremer discloses that at least one voice channel includes voice data selected from the group consisting of: voice data, facsimile data, analog modem data, and digital service data. See col.6 lines 45-55.

Regarding claim 11, Bremer discloses that the DSL modem is a central office modem. See col.6 lines 20-40.

Regarding claims 12, 13, 14, 16, 19, Bremer discloses a method of dynamically allocating bandwidth in a digital subscriber line among channelized data from one or more local phone lines and unchannelized data, the method comprising:

- establishing a connection to a digital subscriber line;

- allocating a portion of the bandwidth for each of the local phone lines in use, the remaining bandwidth available for unchannelized data;

- transmitting the channelized and unchannelized data over the digital subscriber line in their respective allocated bandwidths;

- detecting a change in phone line usage; and

- reallocating the bandwidths among the local phone lines and unchannelized data based on the detected change. See col.10 lines 15-35.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 7, 8, 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bremer et al (U.S Patent No. 6,061,392) in the view of Honkasalo et al (U.S Patent No. 6,091,717)

Regarding claims 7, 8, 20-22, Bremer discloses a method of dynamically allocating bandwidth among voice and data traffic, the bandwidth comprising a plurality of timeslots, the method comprising:

- allocating timeslots among the voice and data traffic;
- composing a a plurality of frames (low level), each frame containing the voice and data traffic in their allocated timeslots;
- sending the first superframe over a digital subscriber line;
- in response to detecting a change in the voice traffic demand, reallocating the timeslots among the voice and data traffic;
- composing frames containing the voice and data traffic in their reallocated timeslots; and
- sending the second superframe over the digital subscriber line. See col.7 lines 45-50.

Bremer does not disclose that data is allocated in a time slot manor wherein time slots being arranged a frame in sequence, the frame being repeated a plurality to times in a network frame, and network frame being repeated a plurality of times in a supper frame. However, Honkasalo discloses data transmission having time slots being arranged a frame in sequence, the frame being repeated a plurality to times in a network frame, and network frame being repeated a plurality of times in a supper frame (col.5 line 45 to 65). Therefore, it would have been obvious to one having ordinary skill in the art at the time the present to have that data is allocated in a time slot manor wherein time slots being arranged a frame in sequence, the frame being repeated a plurality to times in a network frame, and network frame being repeated a plurality of times in a supper frame, so that digital bits can be arranged to read correct in existing network systems.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

-Smith et al (US Patent No. 5,901,205) discloses adaptive voice and data bandwidth management system for multiple line digital subscriber loop data communication.

-Phillips et al (US Patent No. 6,181,715 B1) discloses method and system for providing emulated telephony over DSL.

-Focsaneanu et al (US Patent No. 5,828,666) discloses access to telecommunications networks in multi-service environment.

7. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Thien Tran whose telephone number is (703) 308-4388. The examiner can normally be reached on Monday-Friday from 8:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu, can be reached on (703) 308-6602. Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.



ALPUS H. HSU
PRIMARY EXAMINER